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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,547	01/24/2001	Masaru Kawai	30681-1005	8985

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EXAMINER
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HAMLIN, DERRICK G

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 10/02/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/674,547	<b>Applicant(s)</b> KAWAI ET AL.	
	<b>Examiner</b> Derrick G. Hamlin	<b>Art Unit</b> 1751	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 January 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13, 15, 16, 18-20, 22, 23, 25, 26 and 28-31 is/are rejected.
- 7) ☐ Claim(s) 11, 14, 17, 21, 24 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \*   c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6, 8</u> | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/JP98/02024, filed on 5/6/1998.

### ***Specification***

Claims 11, 14, 17, 21, 24 and 27 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim may not depend on another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 11, 14, 17, 21, 24 and 27 will not be further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The scope of an "effective amount" in claims 2, line 3, is unascertainable.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Evaluations of level of ordinary skill in the art requires consideration of factors such as various prior art approaches employed, types of problems encountered in the art, rapidity with which innovations are made, sophistication of technology involved, educational background of those actively working in the field, commercial success, failure of others, and the inventor's educational level.

The "person having ordinary skill" in this art has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this case reasonably reflect this level of skill.

Claims 1-10, 12, 13, 15, 16, 18-20, 22, 23, 25, 26 and 28-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al. (5085793).

Burns teaches a corrosion-inhibited antifreeze composition. Specifically, the antifreeze composition comprises a major portion of a liquid alcohol freezing point depressant and a minor portion of at least one hydroxyl-substituted aromatic carboxylic acid having the hydroxyl radical disposed proximate to the carboxylic radical. The above described acid is employed as a corrosion inhibitor. (abstract) The reference also discloses that the freezing point depressant is selected from the group consisting of ethylene glycol, diethylene glycol, propylene glycol, etc. and that the composition may be 80 to about 99 weight percent of a liquid alcohol freezing point depressant and from about 20 to about 1 weight percent of a corrosion inhibitor, said corrosion inhibitor consisting of (a) at least one hydroxyl-substituted aromatic carboxylic acid, and (b) member selected from the group consisting of alkali metal borates, alkali metal

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silicates, alkali metal benzoates, alkali metal nitrates, alkali metal nitrites, alkali metal molybdates, hydrocarbyl thiazoles and mixtures thereof, a C8 -C12 aliphatic dibasic acid or the alkali metal, ammonium or amine salt of said acid (col. 5, lines 24-28 and 48-59). The reference teaches several other conventional corrosion inhibitors may be employed in conjunction with the acids which are well known in art, such as alkylbenzoic acid or the alkali metal, ammonium or amine salt thereof; C8 to C12 aliphatic monobasic acid or the alkali metal, ammonium or amine salt thereof and a hydrocarbyl triazole and; alkali metal salt of benzoic acid, an alkali metal salt of a dicarboxylic acid and an alkali metal nitrate; alkali metal carbonates, borax, the alkali metal dichromates, the alkali metal silicates, phosphorus acid, phosphoric acid; an alkali metal tungstate, benzotriazole, tolyltriazole, an alkali metal salt of benzoic or toluic acid, an alkali metal salt of a phenol, an alkanolamine and an organo-silicone compound; and 4-tert-butylbenzoic acid (col. 1, line 31 – col. 2, lines 55).

The reference fails to teach the specific use of cinnamic acids. The reference does not teach which corrosion inhibitors must be included or excluded. The reference also fails to teach the instantly claimed amounts.

Although the reference fails to teach the specific use of cinnamic acids they are encompassed in the general teaching of alkylbenzoic acid. The reference does not teach which corrosion inhibitors must be included or excluded, nor does it require anything more than a one hydroxyl-substituted aromatic carboxylic acid. The reference also fails to teach the instantly claimed amounts for each specific component, however the reference does teach the minimum and maximum amounts of liquid alcohol freezing

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point depressant corrosion inhibitor and instantly claimed amounts clearly overlap with the reference.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the instantly claimed prediluted solutions, since the reference teaches a corrosion-inhibited antifreeze composition which may contain a glycol freezing point depressant and a minor portion of at least one hydroxyl-substituted aromatic carboxylic acid and additional corrosion inhibitors.

In view of the forgoing, the above claims have failed to be patently distinguishable over prior art.

### ***Conclusion***

The remaining references listed on form(s) 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick G. Hamlin whose telephone number is (703) 305-0590. The examiner can normally be reached on Monday-Thursday and alternating Fridays from 8:30 AM - 5:00 PM.


If reasonable attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Group is (703) 872-9310.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Derrick G. Hamlin

9/21/02



YOGENDRA N. GUPTA  
SUPERVISORY PATENT EXAMINER  
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